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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET-NO.	CONFIRMATION NO.	
10/760,209	01/21/2004	Kia Silverbrook	MPA17US	1357	
24011	7590 10/10/2006		EXAMINER		
SILVERB	ROOK RESEARCH PTY	UHLENHAKE, JASON S			
393 DARLI BALMAIN.	NG STREET NSW 2041		ART UNIT PAPER NUMBER		
AUSTRALI			2853	<u>,                                    </u>	
•			DATE MAILED: 10/10/200	DATE MAILED: 10/10/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/760,209	SILVERBROOK ET AL.			
Office Action Summ	nary	Examiner	Art Unit			
		Jason Uhlenhake	2853			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication	on(s) filed on <u>23 Au</u>	ugust 2006.				
2a) This action is <b>FINAL</b> .	2b)⊠ This	action is non-final.				
3) Since this application is in co	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) <u>1-6</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-6</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
230 the attached actained emice action for a not of the continual depice not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)		4) Interview Summary	(PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)						
Information Disclosure Statement(s) (PTo Paper No(s)/Mail Date	O/SB/08)	6) Other:	atent Application			

#### **DETAILED ACTION**

## Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6, and 8 of copending Application No. 10,760,262. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the limitations of the claims of the instant application are contained in the claims of the copending application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 2 - 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 45-49 of copending Application No. 10,760,218. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the limitations of the claims of the instant application are contained in the claims of the copending application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al (U.S. Pat. 6,439,908) in view of Silverbrook (U.S. Pat. 6,916,082).

Silverbrook ('908) discloses:

- **regarding claim 1,** at least one printhead module (10 of Figure 2) comprising at least two, separate printhead integrated circuits (18 of Figure 4), each of the printhead integrated circuits having nozzles formed therein for delivering printing fluid onto the surface of the print media (Column 3, Lines 45 – 47), one elongate support member (16 of Figures 3, 7) supporting the at least two printhead integrated

circuits, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (Column 3, Lines 49-50, 59-65)

- drive electronics incorporating at least one controller arranged to control the printing operation of a selectable number of the at least two printhead integrated circuits via the electrical connector (Column 3, Lines 48-50, 59-65)
- **regarding claim 2,** at least one printhead module comprises one or more groups of four printhead integrated circuits
- **regarding claim 3,** at least one printhead moduel comprises one or more groups of four printhead integrated circuits
- **regarding claim 4,** at least one printhead moduel comprises one or more groups of eight printhead integrated circuits
- regarding claim 6, at least one printhead module (10 of Figure 2) is formed as a unitary arrangement of the at least two printhead integrated circuits (18 of Figure 4), the support member (16 of Figures 3, 7), the electrical connector (48 of Figure 8), and at least one fluid distribution member (26 of Figure 7) mounting the at least two printhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel (80 of Figure 7) for carrying the printing fluid for the pirnthead integrated circuits and includes a plurality of apertures (42 of Figure 7) extending through a wall of the support member arranged so as to direct the printing fluid from the at least on channel to associated nozzles in both, or if more than two, all the printhead integrated circuits by way of respective ones of the fluid distribution members (Figure 7; Column 3, Lines 45 47)

Application/Control Number: 10/760,209 Page 5

Art Unit: 2853

## Silverbrook ('908) does not disclose expressly the following

- **regarding claim 1,** a casing in which the at least one printhead module and the drive electronics are removably mounted, the at least one printhead module being removably mounted to the casing at the elongate support member

- **regarding claim 2,** a single controller is selected for controlling each group of two printhead integrated circuits via the electrical connector
- **regarding claim 3,** a single controller is selected for controlling each group of four printhead integrated circuits via the electrical connector
- regarding claim 4, a single controller is selected for controlling each group of eight printhead integrated circuits via the electrical connector

## Silverbrook ('082) discloses:

- regarding claim 1, casing in which the at least one printhead module and the drive electronics are removably mounted (Column 6, Lines 36 40) the at least one printhead module being removably mounted to the casing at the elongate support member (Column 5, Lines 51 54), for the purpose of replacing any defective modules
- regarding claim 2, a single controller is selected for controlling each
   group of two printhead integrated circuits via the electrical connector (Column 5, Lines 7 18), for the purpose of providing effective control of a number of printhead
   circuits/chips
- regarding claim 3, a single controller is selected for controlling each group of four printhead integrated circuits via the electrical connector (Column 5, Lines

7 – 18), for the purpose of providing effective control of a number of printhead circuits/chips

regarding claim 4, a single controller is selected for controlling each
 group of eight printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 18), for the purpose of providing effective control of a number of printhead circuits/chips

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of a casing in which the at least one printhead module and the drive electronics are removably mounted, the at least one printhead module being removably mounted to the casing at the elongate support member; a single controller is selected for controlling each group of two printhead integrated circuits via the electrical connector; a single controller is selected for controlling each group of four printhead integrated circuits via the electrical connector; a single controller is selected for controlling each group of eight printhead integrated circuits via the electrical connector as taught by Silverbrook ('082) into the device of Silverbrook ('908), for the purpose of controlling a number of printhead circuits/chips and replacing any defective modules.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook (U.S. Pat. 6,439,908) in view of Silverbrook (U.S. Pat. 6,916,082).

Silverbrook ('908) in view of Silverbrook ('082) discloses the claimed invention except for the following:

Application/Control Number: 10/760,209

Page 7

Art Unit: 2853

regarding claim 5, the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art, for the purpose of improving the quality of printing. St. Regis Paper Co. v. Bemis Co., 93 USPQ 8.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector as taught by Silverbrook ('908) in view of Silverbrook ('082), for the purpose of providing effective control of a number of printhead circuits/chips

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSU / ac /

September 29, 2006

STEPHEN MEIER
SUPERVISORY PATENT EXAMINER